

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An auxiliary gearbox of a transmission comprising:
a piston housing having a first bore and a second bore;
a first piston arranged within said first bore separating first and second chambers within said first bore, a first shaft extending from said first piston and connected to a first shift fork for selectively engaging a first auxiliary gear in response to actuation of said first piston;

a second piston arranged within said second bore separating third and fourth chambers within said second bore, a second shaft extending from said second piston and connected to a second shift fork for selectively engaging a second auxiliary gear in response to actuation of said second piston; and

first, second, ~~and third~~ actuators for selectively actuating said pistons, said first actuator fluidly connected to said first chamber, said second actuator fluidly connected to said second and fourth chambers, and said third actuator fluidly connected to said third chamber, wherein a desired gear set is obtained by pressurizing both of said chambers within at least one of said first and second bores.

2. (Currently Amended) The auxiliary gearbox of claim [[1]]~~1~~, wherein said actuators are solenoids supported on said piston housing.

3. (Original) The auxiliary gearbox of claim 2, wherein said solenoids selectively provide pressurized fluid to said chambers.

4. (Currently Amended) The auxiliary gearbox of claim 1, wherein said first and second shafts extend from said pistons respectively into said second and fourth chambers, said first piston adjacent to said first and second chambers, and said second piston adjacent to said third and fourth chambers.

5. (Currently Amended) An auxiliary gearbox of a transmission comprising:
a piston housing having a first bore and a second bore;

a first piston arranged within said first bore separating first and second chambers
within said first bore, a first shaft extending from said first piston and connected to a first
shift fork for selectively engaging a first auxiliary gear in response to actuation of said
first piston;

a second piston arranged within said second bore separating third and fourth
chambers within said second bore, a second shaft extending from said second piston and
connected to a second shift fork for selectively engaging a second auxiliary gear in
response to actuation of said second piston; and

first, second, and third actuators for selectively actuating said pistons, said first
actuator fluidly connected to said first chamber, said second actuator fluidly connected to
said second and fourth chambers, and said third actuator fluidly connected to said third
chamber~~The auxiliary gearbox of claim 1, wherein and each of~~ said actuators include
including on and off states, a first gear set defined by said first and third actuator in said
off state and said second actuator in said on state, a second gear set defined by said first
actuator in said off state and said second and third actuators in said on state, and a third
gear set defined by said first and third actuators in said on state and said second actuator
in said off state.

6. (Currently Amended) An auxiliary gearbox of a transmission comprising:
a piston housing having a first bore and a second bore;

a first piston arranged within said first bore separating first and second chambers within said first bore, a first shaft extending from said first piston and connected to a first shift fork for selectively engaging a first auxiliary gear in response to actuation of said first piston;

a second piston arranged within said second bore separating third and fourth chambers within said second bore, a second shaft extending from said second piston and connected to a second shift fork for selectively engaging a second auxiliary gear in response to actuation of said second piston;

first, second, and third actuators for selectively actuating said pistons, said first actuator fluidly connected to said first chamber, said second actuator fluidly connected to said second and fourth chambers, and said third actuator fluidly connected to said third chamber
~~The auxiliary gearbox of claim 1, wherein and each of said chambers include~~
pressurized and unpressurized states;, a first gear set defined by said second and fourth chambers in pressurized states and said first and third chamber in unpressurized states;, a second gear set defined by said first chamber in said unpressurized state and said first, second, and fourth chambers in said pressurized states;, and a third gear set defined by said first and third chambers in said pressurized states and said second and fourth chambers in said unpressurized states.

7. (Currently Amended) An auxiliary gearbox of a transmission comprising:
a piston housing having a first bore and a second bore;

a first piston arranged within said first bore separating first and second chambers within said first bore, a first shaft extending from said first piston and connected to a first shift fork for selectively engaging a first auxiliary gear in response to actuation of said first piston;

a second piston arranged within said second bore separating third and fourth chambers within said second bore, a second shaft extending from said second piston and

~~connected to a second shift fork for selectively engaging a second auxiliary gear in response to actuation of said second piston; and~~

~~first, second, and third actuators for selectively actuating said pistons, said first actuator fluidly connected to said first chamber, said second actuator fluidly connected to said second and fourth chambers, and said third actuator fluidly connected to said third chamber~~The auxiliary gearbox of claim 1, wherein a desired gear set is obtained by pressurizing three of said chambers.

8.-10. (Cancelled)

11. (New) An auxiliary gearbox of a transmission comprising:

a piston housing having a first bore and a second bore;

a first piston arranged within said first bore separating first and second chambers within said first bore, a first shaft extending from said first piston and connected to a first shift fork for selectively engaging a first auxiliary gear in response to actuation of said first piston;

a second piston arranged within said second bore separating third and fourth chambers within said second bore, a second shaft extending from said second piston and connected to a second shift fork for selectively engaging a second auxiliary gear in response to actuation of said second piston; and

first, second, and third actuators for selectively actuating said pistons, said first actuator fluidly connected to said first chamber, said second actuator fluidly connected to said second and fourth chambers, and said third actuator fluidly connected to said third chamber, wherein a desired gear set is obtained by actuating two of said first, second and third actuators.